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The Office Action mailed February 23, 2001 has been carefully reviewed and considered. Claims 1-36 were pending in the present application. By way of this amendment and reply, claims 14, 15, 19, 21-24, 29 and 30 have been amended. Claim 28 has been cancelled without prejudice or disclaimer. Claim 37 has been introduced to further define the invention. No new matter has been introduced. Accordingly, claims 1-27 and 29-37 remain pending for consideration.

In the Office Action, claims 14-27 and 30-32 were rejected under 35 U.S.C. § 112, second paragraph as allegedly indefinite. Furthermore, claims 21-24 were objected to as reciting intended uses without recitation of structure. In response, Applicant has amended claims 14, 15, 19, 21-24 and 30. Accordingly the rejections have been overcome and the objection has been addressed. Should the Examiner have any further concerns regarding the claim language, he is invited to contact Applicant's undersigned representative by telephone who will endeavor to promptly address such concerns.

Also in the Office Action, claims 1-17, 19-24 and 28-30 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by Douglass et al. (U.S. Patent No. 6,039,688). In addition, claims 18 and 31 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over the same reference. In view of the cancellation of claim 28, the amendments made to the remaining claims and for at least the reasons set forth herein, this rejection is overcome.

The present invention as claimed is directed to an interactive virtual doctor system allowing a user access to one or more levels of service with progressively greater degrees of interaction. The first level of service is primarily informational, allowing a user to request information at the specific level of sophistication appropriate to the user's ability to use the information. At a second level of service the user can comment on the adequacy of the information and the system can determine if referral to a professional is necessary. At a third level of service a client-professional relationship is

established and a professional advises the patient concerning the information needed and other actions which should be taken. At this level, the system can also identify several professionals who should form a team to advise the patient. At a fourth level of service, the system physically interacts with the patient, using monitoring devices or treatment devices. The system communicates messages to and from the devices to monitor patient parameters and to administer management advice, including monitoring or treatment, such as with drugs or other chemicals.

In contrast, Douglas et al. describe a behavior-modification program, where information on the current status of the patient, usually via completing a questionnaire, is provided to the advisor, and then modification assistance is given. The patient keeps a daily journal and through this builds a database that is used by the healthcare professional to monitor the patient's compliance with a program set for the patient, such as diet. If the patient records a higher blood pressure or there is some other sign of the program failing, then the compliance of the patient to the diet or some other factor is alerted and the patient is advised of non-compliance and his/her activities are modified (if the patient complies, of course). The alarm merely alerts the patient that a patient-reported finding is found to be of concern to the provider and needs immediate modification. How this is done is not explained, and it is presumed that the patient has someone to measure his blood pressure, the patient weighs himself, etc.

The reference also describes group counseling sessions, which can be transmitted via the Internet by recording on a disc and sending to patients to learn of similar problems and assistance given other patients in a psychotherapy setting. In essence, changing one's lifestyle is the key to this reference and all of the methods proposed. This is not the same goal or approach taken in the present invention, and has little relevance except for its references to using e-mail, fax, etc., for communication between the parties, and affecting patient behavior by psychotherapeutic interactions. For instance, a cited portion of the

patent provides contact of the patient to a village library to obtain recipes for better diets and to better educate the patient.

Turning to the claim language, claim 1 of the present application recites, in pertinent part, that "the processing device identifies a level of service and provides a user progressively greater degrees of interaction at respective levels of service." Amended independent claims 14, 29 and 30 recite a similar feature. In accordance with the above description of the inapplicability of the reference, simply put, Douglass et al. do not disclose such a device. The device they do disclose may provide different features to a user, as identified in the Office Action. The Douglas reference does not, however, disclose providing "a user progressively greater degrees of interaction" as cited in the present claims. There is no such progression in the reference. Accordingly, the rejections based on the Douglass et al. are respectfully overcome.

Also in the Office Action, claims 14, 20, 25-27, 30 and 32-36 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by Brown (U.S. Patent No. 6,168,563). In view of the amendments to the claims and for at least the reasons set forth herein, this rejection is overcome.

The abstract of the Brown reference generally states it is a system and method enabling a health care provider to monitor and manage a health condition of a patient. A script program is provided to the patient, who completes this and returns it to the provider via the Internet. In this way the provider can come back an ask questions of the patient and proceed to give advice. It also includes sending information supplied by a physiological monitoring device (not defined) such as a blood glucose monitor that is connected to the remotely programmable patient apparatus. After the patient data are received and processed for further management of the patient's health condition, another script program can be sent to the patient for controlling his lifestyle and even managing activities, to the extent that the patient does any of this, of course.

As mentioned above, the present invention as claimed is directed to an interactive virtual doctor system allowing a user access to one or more levels of service with progressively greater degrees of interaction. Turning to the claim language, independent claim 14 of the present application recites, in pertinent part, that "the processing device identifies a level of service and provides a user progressively greater degrees of interaction at respective levels of service." Independent claim 30 recites a similar feature. In accordance with the above description, Applicant submits that Brown does not disclose such a device. The device it discloses may provide different features to a user, as identified in the Office Action. It does not, however, provide "a user progressively greater degrees of interaction." There is no such progression in the reference. With respect to claims 33-36, it is further noted that Brown does not disclose a "treatment device" as recited in those claims, nor does Brown disclose an implanted controlled release reservoir as recited in claim 36. Accordingly, the rejection based on Brown is respectfully overcome.

Applicant respectfully submits that the claims are now in condition for allowance and solicits early notification of the same. Should there be any questions or concerns regarding the present application, the Examiner is invited to contact Applicant's undersigned representative by telephone.

A petition for a one-month extension of time along with the appropriate fee, have been submitted herewith.

Respectfully submitted,

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## VERSION WITH MARKINGS TO SHOW CHANGES MADE

## Marked up rewritten claims:

- 14. (Amended) A networked system linking individuals with a server that provides one or more of [practical] medical, veterinary, [or] and health care information on [disease or health] subjects of interest to an inquirer, and allows the inquirer to interact with health care professionals at several levels with progressively greater degrees of interaction, from pure information gathering to medical diagnostic and therapeutic interventions [by telemedicine methods].
- 15. (Amended) A system as recited in claim 14, wherein a client requests specific disease management information and options, and receives the information on a specific subject or question basis, the information being related to practice guidelines [relevant to] of the inquirer's geographic region.
- 19. (Amended) A system as recited in claim 14, wherein a client receives a requested list of ongoing clinical research trials pertaining to the management of a specific disease [and] at a specific stage [state of interest to the client].
- 21. (Amended) A system as recited in claim 14, wherein [a client can have] said server manages therapeutic interventions performed via cyberspace telemedicine signals over the network.
- 22. (Amended) A system as recited in claim 14, wherein [a client can have] said server manages therapeutic interventions performed utilizing images transmitted over the network.
- 23. (Amended) A system as recited in claim 14, wherein <u>said server</u> <u>controls</u> the telemedicine signals [can] <u>to</u> effect release of a chemical or drug into the client using an implanted device.

- 24. (Amended) A system as recited in claim 20, wherein [a client can have] said server manages therapeutic interventions performed via cyberspace telemedicine signals over the network and wherein said server controls the telemedicine signals [can] to effect release of a chemical or drug into the client by means of an implanted device.
- 29. (Amended) A server for an electronic inquiry-based information system, intended for use with a computer connected to the server over a network, the server comprising:
- a network connection to connect to the network and to provide a communication path with the computer;
- a user interface to present information over the network to a user at the home computer, and to accept an inquiry over the network from the user at the home computer;
  - a system for determining a level of service access for the user;
  - a system for determining a level of sophistication of the user;
- a system for providing the user with progressively greater degrees of interaction at respective levels of service;
- a search processor to create search requests used to acquire information requested in the user inquiry;
- a system for providing a selection of professionals to the user and for creating a team from the selection of professionals for treating a health-related issue of the user; and
- a communication system for directing the user inquiry to the team of professionals.
- 30. (Amended) A method of providing [practical] <u>one or more of</u> medical, veterinary, [or] <u>and</u> other health care information on [disease or health] subjects of interest to a user, the method comprising:

determining a desired level of service access for the user;

accepting an inquiry from the user;

composing a search request based on the user inquiry;

searching a database, using the search request, in order to identify information requested in the user inquiry;

providing the search results to the user;

accepting a follow-up inquiry from the user which entails providing a higher level of service access; and

allowing the user to request a consultation with a health care professional and, if desired by the user, providing the user with a list of possible health care professionals.